

COPY OF PAPERS ORIGINALLY FILED

13CO

#5

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF MAILING

I hereby certify that this INFORMATION DISCLOSURE STATEMENT and documents submitted therewith are being deposited with the United States Postal Service as first class mail, postage prepaid thereon, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

Ariel Fletcher

Date | 100 |

Applicant: Sutcliffe, et al.

Serial No.: 09/965,561

Filed: September 25, 2001

For: METHOD FOR SIMULTANEOUS

IDENTIFICATION OF DIFFERENTIALLY EXPRESSED mRNAs AND MEASUREMENT

OF RELATIVE CONCENTRATIONS

Group: Unassigned

Examiner: Unassigned

Our Ref.: TSRI 401.0D5

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

In recognition of its continuing duty to disclose pursuant to 37 CFR §1.56, Applicant hereby submits the present Information Disclosure Statement in compliance therewith.

Pursuant to 37 CFR §1.98(d), enclosed herewith is a copy of 1) the Information Disclosure Statement and 2) the accompanying PTO Form 1449 filed in the Application Serial Nos. 09/964,597 and 08/152,482. Application Serial No. 09/964,597 was filed on September 25, 2001, and is pending. Application Serial No. 08/152,482 was filed on November 12, 1993, and has issued as U.S. Patent No. 5,459,037. The present application is related by

division. Also, pursuant to 37 CFR §1.98(d), copies of the above references are not submitted herewith, as they are available in the related patent applications 09/964,597 and 08/152,482.

Applicants understand that the interpretation given to each reference may differ from one individual to another. The PTO is therefore encouraged to independently examine the disclosed references. While the references provided in this Information Disclosure Statement may be material pursuant to 37 CFR §1.56, it shall not be construed to be an admission that the cited information is, or is considered to be, material to patentability unless specifically designated as such.

Applicants are filing the present statement pursuant to 37 CFR §1.97(b) insofar as this statement is being filed within three months of the filing of the application and/or before the mailing date of a first Office Action.

Also, in accordance with 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or, that if made, any search was complete or exhaustive, or that no other material information as defined in 37 CFR §1.56 exists.

Respectfully submitted,

December 5, 2001

Date

Thomas Fitting, Reg. No. 34,163

THE SCRIPPS RESEARCH INSTITUTE Office of Patent Counsel 10550 North Torrey Pines Road Mail Drop TPC-8 La Jolla, CA 92037 (858) 784-2937

P:\NancyB\WP\2001\IDS\DGT0048P.IDS

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF MAILING

I hereby certify that this INFORMATION DISCLOSURE STATEMENT and documents submitted therewith are being deposited with the United States Postal Service as first class mail, postage prepaid thereon, in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date indicated below.

Ariel Fletcher

Applicant:

Sutcliffe, et al.

Serial No.: 09/964,597

Filed: September 25, 2001

For: METHOD FOR SIMULTANEOUS

IDENTIFICATION OF

DIFFERENTIALLY EXPRESSED mRNAs) AND MEASUREMENT OF RELATIVE)

CONCENTRATIONS

Group: Unassigned

Examiner: Unassigned

Our Ref.: TSRI 401.0D4

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

In recognition of its continuing duty to disclose pursuant to 37 CFR §1.56, Applicant hereby submits the present Information Disclosure Statement in compliance therewith.

Pursuant to 37 CFR §1.98(d), enclosed herewith is a copy of 1) the Information Disclosure Statement and 2) the accompanying PTO Form 1449 filed in the Application Serial No. 08/152,482. Application Serial No. 08/152,482 was filed on November 12, 1993, and has issued as U.S. Patent No. 5,459,037, to which the present application is related by division. Also, pursuant to 37 CFR §1.98(d), copies of the above references are not submitted

TSRI 401.0 D4

Serial No. 09/964,597

herewith, as they are available in the related patent application 08/152,482.

Applicants understand that the interpretation given to each reference may differ from one individual to another. The PTO is therefore encouraged to independently examine the disclosed references. While the references provided in this Information Disclosure Statement may be material pursuant to 37 CFR §1.56, it shall not be construed to be an admission that the cited information is, or is considered to be, material to patentability unless specifically designated as such.

Applicants are filing the present statement pursuant to 37 CFR §1.97(b) insofar as this statement is being filed within three months of the filing of the application and/or before the mailing date of a first Office Action.

Also, in accordance with 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or, that if made, any search was complete or exhaustive, or that no other material information as defined in 37 CFR §1.56 exists.

Respectfully submitted,

11/29/01

Thomas Fitting, Reg. No. 34,163

THE SCRIPPS RESEARCH INSTITUTE Office of Patent Counsel 10550 North Torrey Pines Road Mail Drop TPC-8 La Jolla, CA 92037 (858) 784-2937

P:\NancyB\WP\2001\IDS\DGT0043P.IDS

FORM PTO	O-1449	U.S. DEPARTMENT OF C PATENT AND TRADEMAR	MERCE RK OFFICE	PE JOS	A DOCKET NO		ERIAL NO. 09/964,597	
.			Y OF PAPERS INALLY FILED	O IM 17 2002 SE	APPLICANT M.G. Erlander et al.			
		ISCLOSURE APPLICANT		S. PATENT DOCUMENTS	FILING DATE September 25, 2001		OUP assigned	
EXAM. INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE	
	-			_			 	
	 							
							 	
	<u> </u>							
EY'M.		DOCUMENT NUMBER	DATE	EIGN PATENT DOCUMENTS COUNTRY		SUB- CLASS	TRANSLATION YES NO	
		9318176	9/16/93	PCT				
		9222651	12/23/92	PCT				
		9101384	2/7/91	PCT				
		O	THER DOCUMENTS	(Including Author, Title, Date	e. Pertinent Pages)			
	I	Baur, et al., Nucleic Acids Research, 21(18), 4272-4280 (1993)						
	2	Fahy, et al., PCR Methods of	and Applications, 1,	25-33 (1991)				
	3	Ko, Nucleic Acids Research	i, 18(19), 5705-571	I (1990)				
	4	Rubenstein, et al., Nucleic	Acids Research, 18,	4833-4842 (1990)				
	5	Stoflet, et al., Science, 239,	491-494 (1988)					
	6	White, et al., Trends in Gen	netics, 5(6), 185-188	(1989				
	7	Stratagene Product Catalog	ne (1993)	· · · · · · · · · · · · · · · · · · ·	<u> </u>			

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER



30457.1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

<pre>In re application of: M.G. Erlander et al.)</pre>	Group Art Unit: Examiner:
Serial No.: 08/152,482) Filed: November 12, 1993)	Date Mailed: May 2, 1994
For: METHOD FOR SIMULTANEOUS IDENTIFICATION OF DIFFERENTIALLY EXPRESSED mRNAs AND MEASUREMENT OF RELATIVE CONCENTRATIONS)	Los Angeles, California

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

Dear Sir:

This document is an Information Disclosure Statement to the above-cited patent application, enclosed herein.

Attached hereto is at least one Form PTO-1449 listing documents believed relevant to the subject application. The submission of the following information is not intended, nor should it be construed, to constitute an admission that any patent, article, or other information referred to herein is "prior art" unless specifically designated as such. In accordance with 37 C.F.R. § 1.97(b) the filing of this information shall not be construed to mean that a search has been made or that no other material information may exist. Neither should its submission be construed to indicate that a thorough search should not be conducted by the Examiner.

It is believed that this disclosure complies with the requirements of 37 C.F.R. § 1.56, § 1.97, and § 1.98 and the Manual of Patent Examining Procedures § 707.05(b). If for some reason the Examiner considers otherwise, it is respectfully requested that the undersigned be telephoned so that any deficiencies can be remedied.

A copy of each document is enclosed. Some of the documents may have markings thereon. No significance is meant to be attached to the markings. These documents are not necessarily analogous art. Additionally, the order of the following documents is to be accorded no particular import as the order thereof is completely fortuitous.

It is respectfully requested that these documents be:
(1) fully considered by the Patent and Trademark Office during
the examination of this application; and (2) represented on any
patent which may issue on the application. Applicants
respectfully request that copies of the PTO-1449 forms, as
considered and initialled by the Examiner, be returned with the
next communication.

- , Exhibit 1 is a publication, J.H. Nadeau et al., "Multilocus Markers for Mouse Genome Analysis: PCR Amplification Based on Single Primers of Arbitrary Nucleotide Sequence," Mamm. Genome 3: 55-64 (1992).
- Exhibit 2 is a publication, S.R. Woodward et al., "Random Sequence Oligonucleotide Primers Detect Polymorphic DNA Products Which Segregate in Inbred Strains of Mice," Mamm. Genome 3: 73-78 (1992).
- Exhibit 3 is a publication, J.O. Bishop, "The Gene Numbers Game," Cell 2: 81-86 (1974).

- *Exhibit 4 is a publication, T. Ohta & M. Kimura, "Functional Organization of Genetic Material as a Product of Molecular Evolution," Nature 233: 118-119 (1971).
- * Exhibit 5 is a publication, N.D. Hastie & J.O. Bishop, "The Expression of Three Abundance Classes of Messenger RNA in Mouse Tissues," Cell 9: 761-774 (1976).
- , Exhibit 6 is a publication, J.A. Bantle & W.E. Hahn, "Complexity and Characterization of Polyadenylated RNA in the Mouse Brain," Cell 8: 139-150 (1976).
- Exhibit 7 is a publication, D.M. Chikaraishi, "Complexity of Cytoplasmic Polyadenylated and Nonpolyadenylated Rat Brain Ribonucleic Acids," <u>Biochemistry</u> 18: 3249-3256 (1979).
 - Exhibit 8 is a publication, R.J. Milner & J.G.
 Sutcliffe, "Gene Expression in Rat Brain," <u>Nucl. Acids Res.</u> 11:
 5497-5520 (1983).
 - Exhibit 9 is a publication, J.G. Sutcliffe, "mRNA in the Mammalian Central Nervous System," <u>Ann. Rev. Neurosci.</u> 11: 157-198 (1988).
- Exhibit 10 is a publication, M.D. Adams et al., "Complementary DNA Sequencing: Expressed Sequence Tags and Human Genome Project," <u>Science</u> 252: 1651-1656 (1991).
- Exhibit 11 is a publication, M.D. Adams et al.,
 "Sequence Identification of 2,375 Human Brain Genes," Nature 355:
 632-634 (1992).
- *Exhibit 12 is a publication, J.G.K. Williams et al., "DNA Polymorphisms Amplified by Arbitrary Primers Are Useful as Genetic Markers," Nucl. Acids Res. 18: 6531-6535 (1990).

- Exhibit 13 is a publication, J. Welsh & M. McClelland, "Fingerprinting Genomes Using PCR With Arbitrary Primers," <u>Nucl.</u> Acids Res. 18: 7213-7218 (1990).
- * Exhibit 14 is a publication, J. Welsh et al.,
 "Arbitrarily Primed PCR Fingerprinting of RNA," <u>Nucl. Acids Res.</u>
 20: 4965-4970 (1992).
- Exhibit 15 is a publication, P. Liang & A.B. Pardee, "Differential Display of Eukaryotic Messenger RNA by Means of the Polymerase Chain Reaction," <u>Science</u> 257: 967-971 (1992).
- *Exhibit 16 is a publication, M. Orita et al.,

 "Detection of Polymorphisms of Human DNA by Gel Electrophoresis
 as Single-Strand Conformation Polymorphisms," Proc. Natl. Acad.

 Sci. USA 86: 2766-2770 (1989).
- Exhibit 17 is a publication, M. Orita et al., "Rapid and Sensitive Detection of Point Mutations and DNA Polymorphisms Using the Polymerase Chain Reaction," <u>Genomics</u> 5: 874-879 (1989).
- * Exhibit 18 is a publication, S. Forss-Petter et al., "Neuron-Specific Enolase: Complete Structure of Rat mRNA, Multiple Transcriptional Start Sites, and Evidence Suggesting Post-Transcriptional Control," J. Neurosci. Res. 16: 141-156 (1986).
- , Exhibit 19 is a publication, G.H. Travis & J.G. Sutcliffe, "Phenol Emulsion-Enhanced DNA-Driven Subtractive dCNA Cloning: Isolation of Low-Abundance Monkey Cortex-Specific mRNAs," Proc. Natl. Acad. Sci. USA 85: 1696-1700 (1988).
- Exhibit 20 is a publication, P. Liang et al.,
 "Distribution and Cloning of Eukaryotic mRNAs by Means of

Differential Display: Refinements and Optimization, " Nucl. Acids Res. 21: 3269-3725 (1993).

Respectfully submitted,

Michael B. Farber

Registration Number 32,612

Merchant & Gould Westwood Gateway II 11150 Santa Monica Boulevard, Suite 400 Los Angeles, California 90025 (310) 445-1140

t heraby certify that this correspondence is being to posited with the United States Postal Service as first class mail in an envalore addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231
en MAY 2 1994
(Date of Deposit)

Sheet	: 1	of	3

-			IDE VOX			bilece	V* - <u></u> -
Form 1449*			O 14 1 7 2012	Atty. Docker 30457.1US	Atty. Docket No. Serial No 30457.1US01 08/152.482		
INFORM	ATION DISCLOSU	RE STATEME		Applicant M.G. Erlan	nder et	al.	
← (Use s	BY APPLIO		LEY)	Filing Date	e 2, 1993	Group	
			U.S. PATEN	I DOCUMENTS			
**Examiner Initial	Document Number	Date	Name		Class S	bclass	Filing Date (If Appropriate)
	! !						
	! !						
	 -						
					·		
			FOREIGN PATE	NT DOCUMENTS			
**Examiner Initial	Document Number	Date	Country		Class Su	bclass	Translation Yes No
			-				
······································							
		•					
					 		
	/ to al.		OTHER DO				
**Examiner Initial	(Incl)	uding Author,	Title, Date, Perti	ment rages, Etc.)			
	for mouse gen	ome analys	sis: PCR ampli	ard, G., Denial R., and Paigen, fication based ome 3:55-64 (Ex	on singl	le primers	, Norberg, locus markers of arbitrary
	loligonucleoti	de primer:	s detect polvm	euscher, C., (1 orphic DNA prod 3:73-78 (Exhibi	ducts who	dom sequer ich segreg	nce ate in inbred
	Bishop, J.O.,	(1974) T	he Gene Numbe	rs Game. Cell	2:81-86	(Exhibit 3	3)
	Ohta, T. and Product of Mo	Kimura, M lecular E	., (1971) Fund volution. Na	ctional Organiz ture 233:118-11	ation of 9 (Exhib	Genetic l	Material as a

	Hastie, N.D., and Bishop, J.O., (1976) The Expression of Three Abundance Clas of Messenger RNA in Mouse Tissues. Cell 9:761-774 (Exhibit 5)
	Bantle, J.A., and Hahn, W.E., (1976) Complexity and Characterization of Polyadenylated RNA in the Mouse Brain. Cell 8:139-150 (Exhibit 6)
	Chikaraishi, D.M., (1979) Complexity of Cytoplasmic Polyadenylated and Nonpolyadenylated Rat Brain Ribonucleic Acids. Biochemistry 18(15):3249-3256 (Exhibit 7)
	Milner, R.J., and Sutcliffe, J.G., (1983) Gene expression in rat brain. Nucleic Acids Research 11(16):5497-5520 (Exhibit 8)
	Sutcliffe, J.G., (1988) mRNA in the Mammalian Central Nervous System. Ann. R. Neurosci. 11:157-98 (Exhibit 9)
	Adams, M.D., Kelley, J.M., Gocayne, J.D., Dubnick, M., Polymeropoulos, M.H., Xiao, H., Merril, C.R., Wu, A., Olde, B., Moreno, R.F., Kerlavage, A.R., McCombie, W.R., and Venter, J.C., (1991) Complementary DNA Sequencing: Express Sequence Tags and Human Genome Project. Science 252:1651-1656 (Exhibit 10)
	Adams, M.D., Dubnick, M., Kerlavage, A.R., Moreno, R., Kelley, J.M., Utterback T.R., Nagle, J.W., Fields, C., and Venter, J.C., (1992) Sequence identification of 2,375 human brain genes. Nature 355:632-634 (Exhibit 11)
_	Williams, J.G.K., Kubelik, A.R., Livak, K.J., Rafalski, J.A., and Tingey, S.V. (1990) DNA polymorphisms amplified by arbitrary primers are useful as genetic markers. Nucleic Acids Research 18(22):6531-6535 (Exhibit 12)
	Welsh, J., and McClelland, M., (1990) Fingerprinting genomes using PCR with arbitrary primers. Nucleic Acids Research 18(24):7213-7218 (Exhibit 13)
	Welsh, J., Chada, K., Dalal, S.S., Cheng, R., Ralph, D., and McClelland, M., (1992) Arbitrarily primed PCR fingerprinting of RNA. Nucleic Acids Research 20(19): 4965-4970 (Exhibit 14)
	Liang, P., and Pardee, A.B., (1992) Differential Display of Eukaryotic Messeng RNA by Means of the Polymerase Chain Reaction. Science 257:967-971 (Exhibit 1
	Orita, M., Iwahana, H., Kanazawa, H., Hayashi, K., and Sekiya, T., (1989) Detection of polymorphisms of human DNA by gel electrophoresis as single-stran conformation polymorphisms. Proc. Natl. Acad. Sci. USA 86:2766-2770 (Exhibit 1
	Orita, M., Suzuki, Y., Sekiya, T., and Hayashi, K., (1989) Rapid and Sensitive Detection of Point Mutations and DNA Polymorphisms Using the Polymerase Chain Reaction. Genomics 5:874-879 (Exhibit 17)
40.	Forss-Petter, S., Danielson, P., and Sutcliffe, J.G., (1986) Neuron-Specific Enolase: Complete Structure of Rat mRNA, Multiple Transcriptional Start Sites and Evidence Suggesting Post-Transcriptional Control. Journal of Neuroscience Research 16:141-156 (Exhibit 18)

COPY OF PAPERS



Sheet <u>3</u> of <u>3</u>

,	
·	Travis, G.H., and Sutcliffe, J.G., (1988) Phenol emulsion-enhanced DNA-driven subtractive cDNA cloning: Isolation of low-abundance monkey cortex-specific mRNAs. Proc. Natl. Acad. Sci. 85:1696-1700 (Exhibit 19)
	Liang, P., Averboukh, L., and Pardee, A.B., (1993) Distribution and cloning of eukaryotic mRNAs by means of differential display: refinements and optimization. Nucleic Acis Research 21(14): 3269-3275 (Exhibit 20)
Examiner	Date Considered

^{*}Substitute Disclosure Statement Form (PTO-1449)

^{**}EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.